AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 3 without prejudice or disclaimer. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) Process for the amplification and quantitative real-time detection of nucleic acids, comprising

a) using a primer to which a nucleic acid sequence is attached, which codes for the sequence motif 5'-GAAA-3' (motif A) in the transcript,

b) carrying out the amplification in the presence of an excess of a nucleic acid probe, which contains the sequence motif 5'-CUGANGA-3' (motif B) and is capable of being released from a target nucleic acid molecule by cleavage of a ribozyme, and which probe contains a reporter molecule and a quencher molecule attached to each probe molecule, and

c) determining the concentration of the target nucleic acid molecule in the sample by measuring the time-dependent change in fluorescence during amplification, the relative concentration "$C_{rel.}$"

being determined according to the following formula:

$C_{rel.}=t_p/t_{Ref.}$

where

t_p corresponds to the time measured for the sample from the start of amplification to the reaching of the fluorescence threshold value and

$t_{ref.}$ corresponds to time measured for a reference nucleic acid of known concentration from the start of amplification to the reaching of the fluorescence threshold value.

Claim 2 (Canceled).

3. (Currently amended) Process for the amplification and quantitative real-time detection of a target nucleic acid molecule containing the sequence motif 5'-GAAA-3' (motif A), comprising

a) choosing the sequences of the primers such that a region of the nucleic acid which contains motif A is amplified,

b) carrying out the amplification in the presence of an excess of a nucleic acid probe which contains the sequence motif 5'-CUGANGA-3' (motif B) and is capable of being released from a target nucleic acid molecule by cleavage of a ribozyme, and which probe contains a reporter molecule and a quencher molecule attached to each probe molecule, and

c) determining the concentration of the target nucleic acid molecule in the sample by measuring the time-dependent change in fluorescence during the amplification, the relative concentration "$C_{rel.}$" being determined according to the following formula:

$$C_{rel.}=t_p/t_{Ref.}$$

where

t_p corresponds to the time measured for the sample from the start of the amplification to the reaching of the fluorescence threshold value and

$t_{Ref.}$ corresponds to the time measured for a reference nucleic acid of known concentration from the start of the amplification to the reaching of the fluorescence threshold value.

Claim 4 (Canceled).

5. (Previously Presented) Process according to claim 1, characterized in that the target nucleic acid molecule is RNA, DNA or a DNA/RNA chimera.

6. (Previously Presented) Process according to claim 1 characterized in that the nucleic acid sequence attached to the primer has a length of 4 to 40 nucleotides.

7. (Previously Presented) Process according to claim 1, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

8. (Previously Presented) Process according to claim 1 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

9. (Previously Presented) Process according to claim 1, characterized in that the amplification process is an isothermal or cyclical amplification process.

10. (Previously Presented) Process according to claim 9, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

11. (Previously Presented) Process according to claim 1 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

Claims 12-29 (Canceled).

30. (Previously Presented) Process according to claim 3 characterized in that the primers of step (a) have a length of 1 to 40 nucleotides.

31. (Previously Presented) Process according to claim 30, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

32. (Previously Presented) Process according to claim 31 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

33. (Previously Presented) Process according to claim 31, characterized in that the amplification process is an isothermal or cyclical amplification process.

34. (Previously Presented) Process according to claim 33, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

35. (Previously Presented) Process according to claim 31, characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

36. (Previously Presented) Process according to claim 3, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

37. (Previously Presented) Process according to claim 36 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

38. (Previously Presented) Process according to claim 36, characterized in that the amplification process is an isothermal or cyclical amplification process.

39. (Previously Presented) Process according to claim 38, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

40. (Previously Presented) Process according to claim 36 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

41. (Previously Presented) Process according to claim 3 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

42. (Previously Presented) Process according to claim 41, characterized in that the amplification process is an isothermal or cyclical amplification process.

43. (Previously Presented) Process according to claim 42, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

44. (Previously Presented) Process according to claim 41 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

45. (Previously Presented) Process according to claim 3, characterized in that the amplification process is an isothermal or cyclical amplification process.

46. (Previously Presented) Process according to claim 45, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

47. (Previously Presented) Process according to claim 45 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

48. (Previously Presented) Process according to claim 3, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

49. (Previously Presented) Process according to claim 48 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

50. (Previously Presented) Process according to claim 3 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

51. (Previously Presented) Process according to claim 5 characterized in that the nucleic acid sequence attached to the primer has a length of 4 to 40 nucleotides.

52. (Previously Presented) Process according to claim 51, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

53. (Previously presented) Process according to claim 51 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

54. (Previously Presented) Process according to claim 51, characterized in that the amplification process is an isothermal or cyclical amplification process.

55. (Previously Presented) Process according to claim 54, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

56. (Previously Presented) Process according to claim 51 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

57. (Previously Presented) Process according to claim 5, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

58. (Previously Presented) Process according to claim 57 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

59. (Previously Presented) Process according to claim 57, characterized in that the amplification process is an isothermal or cyclical amplification process.

60. (Previously Presented) Process according to claim 59, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

61. (Previously Presented) Process according to claim 57 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

62. (Previously Presented) Process according to claim 5 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides.

63. (Previously Presented) Process according to claim 62, characterized in that the amplification process is an isothermal or cyclical amplification process.

64. (Previously Presented) Process according to claim 63, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

65. (Previously Presented) Process according to claim 62, characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

66. (Previously Presented) Process according to claim 5, characterized in that the amplification process is an isothermal or cyclical amplification process.

67. (Previously Presented) Process according to claim 66, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

68. (Previously Presented) Process according to claim 66 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

69. (Previously Presented) Process according to claim 5, characterized in that the amplification process is selected from the group consisting of nucleic acid sequence-based amplification (NASBA®), TMA, 3SR or PCR.

70. (Previously Presented) Process according to claim 69 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

71. (Previously Presented) Process according to claim 5 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

72. (Previously Presented) Process according to claim 3, characterized in that the target nucleic acid molecule is RNA, DNA or a DNA/RNA chimera.